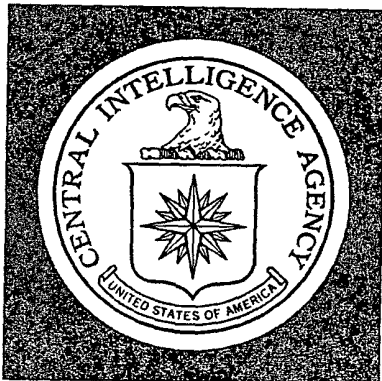


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Scientific and Technical Intelligence Report

*Viet Cong/North Vietnamese Army Medical Facilities
in Cambodia*

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July 1969

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**VIET CONG/NORTH VIETNAMESE ARMY MEDICAL
FACILITIES IN CAMBODIA**

Project Officer



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PREFACE

Vietnamese Communist military medical facilities in South Vietnam (SVN) have been difficult to establish, operate, and maintain in recent years due to the constant threat of attack. Supplying such facilities with drugs, equipment, and other medical items has proven equally difficult for the same reason. The problem of physical security has been partially solved for Communist combat forces in provinces near Cambodia by establishing sizable hospital facilities just over the Cambodian border that enjoy freedom from direct attack. This paper describes known Vietnamese Communist medical facilities in Cambodia and judges their probable effectiveness. The cutoff for information is May 1969.

This report has been produced by CIA. It was prepared by the Office of Scientific Intelligence and coordinated with the Directorate of Intelligence.

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CONTENTS

	<i>Page</i>
PREFACE	iii
PROBLEM	1
SUMMARY AND CONCLUSIONS	1
DISCUSSION	2
Introduction	2
The medical complex at Ba Thu, Svay Rieng Province, Cambodia	3
Medical element 1	3
Medical element 2	3
Medical element 3	5
Medical element 4	5
The Mimot area, Kompong Cham Province	6
Medical facilities of the Central Office for South Vietnam in Kompong Cham Province	7
Mondolkiri and Ratanakiri Provinces	9
Takeo Province	9
VC/NVA medical training facilities in Cambodia	10
The medical training facilities at Ba Thu	10
The COSVN medical training facility in Kompong Cham Province	10
The medical training facility in Mondolkiri Province	11
Sources of medical supply for VC/NVA hospitals in Cambodia	11
Cambodian Government activities regarding medical aid to VC/NVA forces	13

FIGURE

Cambodia VC/NVA medical facilities	<i>Following</i>	4
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VIET CONG/NORTH VIETNAMESE ARMY MEDICAL FACILITIES IN CAMBODIA

PROBLEM

To describe Viet Cong/North Vietnamese Army medical facilities in Cambodia, judge their probable effectiveness in treating casualties, and determine their sources of medical supply.

SUMMARY AND CONCLUSIONS

Viet Cong and North Vietnamese Army (VC/NVA) forces operating in SVN have established at least 10 hospital compounds in Cambodia near the border of SVN in Svay Rieng, Kompong Cham, Mondolkiri, Ratanakiri, and Takeo provinces. The facilities are in direct support of VC/NVA military forces in SVN and are not intended to support Communist insurgency against Cambodia at this time. These hospital compounds range from wooden hut dwellings dispersed in the local inhabited areas and adapted for medical use to single wooden frames roofed with nylon cloth or, simply, small clearings roofed with nylon. Although these facilities are said to be capable of handling a maximum 7,000 patients, it is estimated that no more than 2,500 patients can be cared for effectively at any one time with the currently known facilities and personnel. Most of the patient load for these hospitals results from combat actions in the provinces of SVN near Cambodia.

The VC/NVA facilities in Cambodia are qualitatively no better than those established in SVN but because of their location they possess certain important advantages. These fa-

cilities tend to be larger than those in SVN and are frequently fixed rather than mobile. Because they are relatively free from attack they can provide, in relative safety, all of the treatment and convalescent care that the VC/NVA are capable of giving their casualties. Also, their location near the SVN border and southward to the Mekong Delta reduces the time required for transit of seriously wounded personnel and increases their chances of survival compared with the alternative transfer by stretcher from station to station from SVN to Laos or North Vietnam (NVN). In spite of this, for the seriously wounded and for many with moderate or light wounds, there appears to be a relatively low rate of return to combat duty because of shortages of qualified medical personnel and diagnostic equipment and periodic shortages of essential drugs. The low rate of return becomes particularly evident when a hospital experiences sudden overloading after battle.

Three medical training facilities have been identified as associated with VC/NVA medical facilities in Cambodia. The quality of training appears to be low, about on a par with those graduated from VC-operated medical training facilities in SVN. Lack of sufficient equipment,

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unavailability of competent full-time instructors, and increases in the numbers of wounded cannot be offset by the additional physical security.

Major sources of drugs and medical equipment used by VC/NVA medical facilities in Cambodia are provided through East and West European imports shipped into Cambodian ports, from the stock of pharmaceutical distributors in Phnom Penh, from local pharmacies in other Cambodian cities, and from the dispensaries of large plantations in areas near the SVN border. Large quantities of drugs and equipment are also purchased on the black markets in SVN and brought in from NVN via the Ho Chi Minh Trail. Hospital facilities located toward the south of Cambodia tend to obtain more medical

supplies through Cambodia, while those to the north obtain more from NVN.

The appearance of VC/NVA medical facilities in Cambodia has given rise to a large business in drugs over which the Royal Khmer Government (RKG) is exercising little effective control. Local Chinese business interests, Vietnamese immigrants in areas bordering SVN, local Cambodian military personnel, and Cambodian villagers living in the same areas participate in the drug traffic. The volume of goods probably is sufficient to satisfy a significant part of VC/NVA hospital requirements in Cambodia. Some of this supply finds its way into SVN as well. The RKG has attempted unsuccessfully to control and/or limit the volume of medical and other supplies being distributed to VC/NVA forces.

DISCUSSION

INTRODUCTION

Communist insurgent movements in Southeast Asia have included the development of medical support groups in their earliest stages of organization. The support groups provide vitally important civic action programs aimed at gaining the active support of potentially dissident groups in rural areas, and later provide military medical support for armed insurgent forces in those rural areas. This pattern of development has been observed in South Vietnam, Laos, and most recently, in Thailand. In each of these three countries, the communist strategic plan has involved the establishment of an internal insurgent movement against the government that erupts into armed encounters, and that finally culminates in direct military support from the sponsoring country or countries.

After the movement in SVN began, military support in force from North Vietnam could not be made until insurgent forces in Laos had, with NVN help, improved supply routes through the eastern half of that country to allow troops and supplies to flow freely from north to south.

The role of Cambodia in the communist scheme for Southeast Asia has differed considerably from that of the other countries involved. Cambodia, which borders SVN from Kontum Province south to the Gulf of Siam, has professed neutrality throughout the conflict. Superior North Vietnamese Army and Viet Cong forces are able to utilize areas of Cambodia near the SVN border with relative impunity and take advantage of Cambodian sources of medical supply.

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THE MEDICAL COMPLEX AT BA THU, SVAY RIENG PROVINCE, CAMBODIA

The medical complex at Ba Thu, Svay Rieng Province, Cambodia, was built and operated by NVA and VC medical commands and serves wounded and ill troops from neighboring provinces of SVN, selected Cambodian military personnel, and local villagers from both sides of the border. Since 1965, at least four locations have been associated with a "Ba Thu hospital," all near the border and confined to the salient of Svay Rieng Province projecting into Hau Nghia and Kien Tuong Provinces of SVN. The collective facilities are made up of four medical elements, all part of the Ba Thu medical complex.

Medical Element 1

In mid-October 1965, it was reported that the VC Central Regional Committee had established a military hospital in a triangular area between XS250965, XS245955, and XS255955 (figure),* situated in Svay Rieng Province bordering Kien Tuong Province, SVN. The hospital consisted of several rows of thatched huts under dense foliage. No information was available on the specific NVA/VC units served or the types and amount of medicines and equipment. About 100 patients could be treated. The staff consisted of one NVA doctor (training and qualifications unknown) and 20 assistants.

An intermediate receiving station was located at XS252948 just inside SVN in Phong Phu town, Kien Tuong Province. Wounded and ill were checked in at the receiving station, given emergency treatment, then carried to the hospital via sampan along the Maren canal.¹

*Refer to figure for locations of the four "medical elements". All grid coordinates for the Ba Thu complex are from AMS Series L7014, Sheet 6230IV, Vietnam 1:50,000, 1965.

The fact that the emergency treatment facility was placed just inside SVN indicates that the hospital in question served primarily the adjacent portions of Hau Nghia and Kien Tuong Provinces.

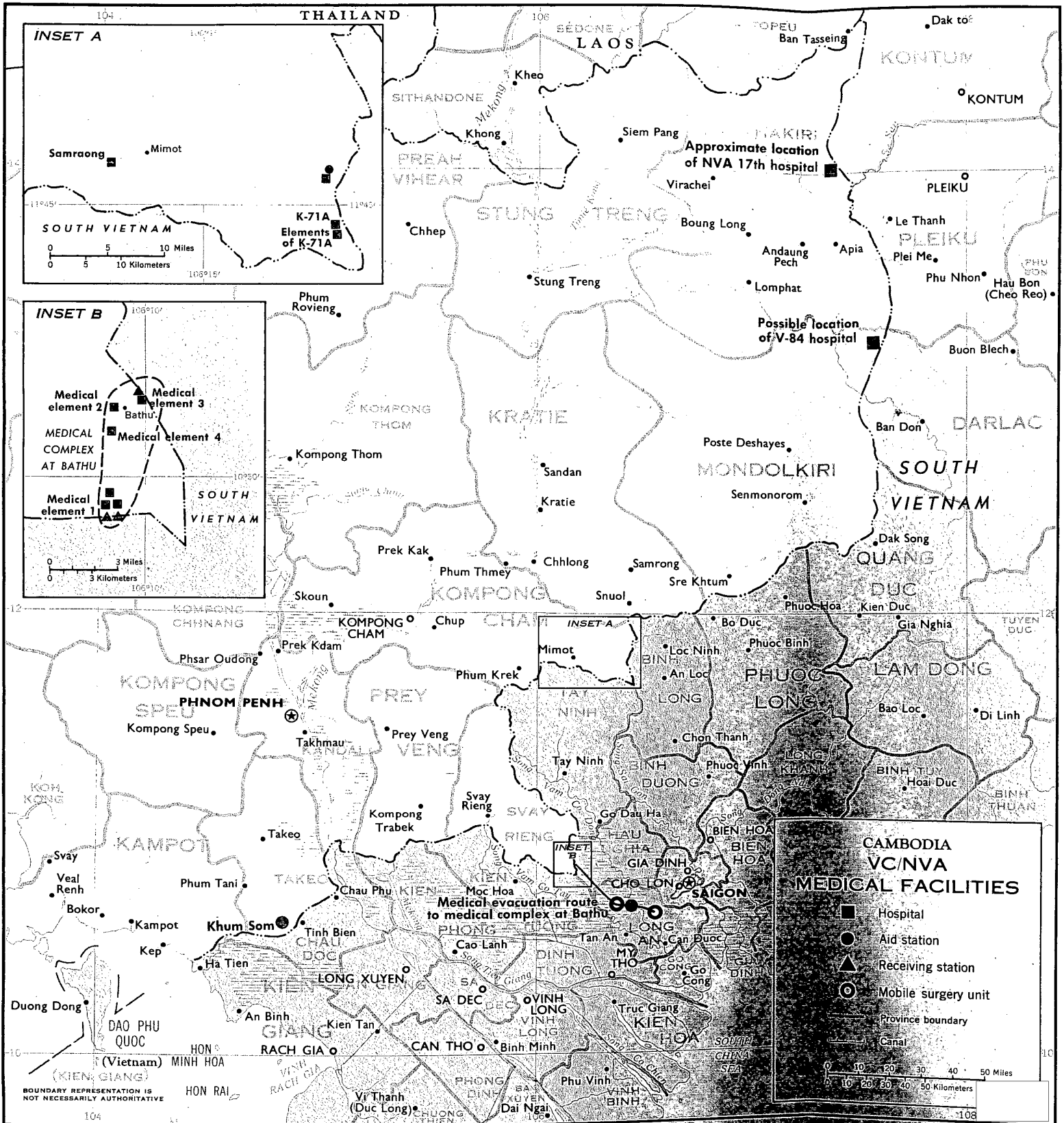
Medical Element 2

In August 1966, it was established that the medical section of VC Military Region (MR) 4 had placed a hospital in Svay Rieng Province near the village of Ba Thu at XT252025. The hospital was directly subordinate to the VC Binh Tan Subregion and was a part of MR-4's medical complex located on Cambodian soil. The MR-4 medical section also included a mobile surgery unit located in Long An Province, SVN, at XS630800, a recuperation center in Svay Rieng Province at XT273034, the medical section of the VC 6th Battalion, and military medical elements of five zones under the Binh Tan Subregion.²

the hospital at Ba Thu was called the Binh Tan Military Hospital. Its location was about 4 kilometers from the Cambodian border and 5 km north of the triangular-shaped facility described in 1965.³ Like the latter, the bed capacity was described as between 100 and 150.

By October 1967, the physical plant of the Binh Tan Military Hospital consisted of four buildings of thatched construction that included a surgical theater, a leprosarium, a tuberculosis ward, and a residence for the chief doctor. Wounded personnel were treated in the surgery hut, which measured 3 x 6 meters (m) and which was draped with white sheeting. There was one operating table and two tables for equipment. All four houses were located among the private residences of Vietnamese expatriates, and some of the wounded were quartered in private homes.

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The Binh Tan hospital was primarily responsible for wounded and ill from units under the Binh Tan Wing—mostly troops from the VC 6th Battalion. Other troops from VC MR-4 were treated when wounded in joint actions with the Binh Tan Wing. In addition, the hospital provided treatment for local Vietnamese immigrants living in Cambodia and for selected members of the Cambodian armed forces in garrisons near Ba Thu. "Treatment cells" were also formed from the hospital and sent into Long An Province, SVN, for two-month periods to treat local villagers in VC-occupied areas as a civic action. All wounded and sick troops or civilians seeking treatment at Binh Tan were required to have a letter of authorization from authorities of the Binh Tan Wing.

The staff of the Binh Tan Military Hospital consisted in 1967 of 51 personnel, including the hospital chief, political officers, finance officers, the medical and surgical staff, and a dental officer. The medical and surgical staff was divided among an internal diseases section (surgical treatment) with 15 personnel.^{3 4} The hospital chief appeared to be the only graduate physician on the staff. Most of the treatment afforded, therefore, was performed by medical technicians (two years of medical training) and by medics (six months of medical training). The technicians performed minor operations and made routine diagnoses while the physician (seven years of medical training) performed major surgery and handled the more complicated diagnoses. Medics did routine patient examinations, cleaned wounds, gave injections, and applied splints and bandages. Also, medics could be "promoted" to physician status through a system of advanced study. There were no female physicians at Ba Thu. Aid men performed first aid on the battlefield.⁴

The principal pathologies treated at the Binh Tan hospital were said to be battle wounds,

malaria, dysentery, typhoid, pneumonia, tuberculosis, leprosy, "nerve diseases" (possibly hypovitaminoses), kidney disease, and appendicitis. Accounts given by captured VC medical personnel and by captured VC medical documents concerning methods of treating wounds and diseases demonstrate an awareness by the NVA and the VC of sound medical practices. The frequent failure to institute proper and adequate treatment has resulted from poor facilities, lack of sufficient amounts of proper equipment, lack of electricity, the uncertainty of drug resupply (particularly blood substitutes), shortage of trained medical personnel, and the fact that facilities become rapidly overloaded after a major battle making it impossible to give timely treatment to large numbers of wounded.^{2 4} The continuous pressure placed on VC/NVA troops by US and South Vietnamese forces in areas of SVN served by the BA Thu medical complex makes it unlikely that their medical treatment can be improved with time.

Sources of supply for the complex of medical facilities at Ba Thu are said to come principally from the open market in Cambodia, with small amounts being purchased on the black market in the Republic of Vietnam (RVN). Approximately 90 percent of the drug supplies are purchased directly or procured clandestinely from pharmacies in Phnom Penh or in cities in nearby provinces. About 10 percent of the drug supplies are purchased by VC agents from black markets in the RVN. Funds are furnished the local medical commands from the Rear Services Section of MR-4, and these are used to make the necessary purchases. Most of the purchases are made by local Vietnamese immigrants living in the Ba Thu area. To date, only two shipments of drugs and supplies are said to have been sent to Ba Thu from NVN.

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Medical Element 3

While medical element 2 appears to be the main treatment center in the Ba Thu medical complex as well as its command center, two other facilities have been described [redacted]

[redacted] These two elements are located about one and a half miles from element 2 and are so close together that they undoubtedly represent sections of the same facility. The first of these was located at XT273034 as of April 1967 and consisted of three wooden houses 5m x 3m laid out in a rectangular area 150m x 50m. Each house held 12 beds, giving a total bed capacity of 36. One corner of one of the houses was reserved as the treatment room. There was no electricity. Light wounds and various diseases were treated, including tuberculosis. The staff consisted of one doctor, two medics, and one nurse. In April 1967, there were 21 in-patients.³ This is probably the recuperation center of the Binh Tan hospital.

The second facility of element 3 was located at XT274035 in October 1968. Source for this was [redacted]

[redacted] He described element 3 as having five patient wards measuring 24m x 10m x 2m, each holding 50 to 60 patients. In addition there were two huts for the medical staff. This source was later removed to another area due to overcrowding of the Ba Thu facility.⁵ A second source who was a medic for the VC 6th Battalion was trained at a medical school that he described as being 100m west of a hospital located at XT274035.⁶ Medical element 3 probably serves as a receiving and initial treatment facility and as a recuperation center for medical element 2 (the main element of the Binh Tan hospital). It appears to have a bed capacity of about 300.

Medical Element 4

This element of the Ba Thu complex was located at XT252008 in April 1968. It was said to serve VC MR-4 troops primarily and to serve other VC units when they were active in the MR-4 area. The facility consisted of nine thatched houses 16m x 3.5m each holding 20 beds, or a total capacity of 180 beds. The staff consisted of three medical technicians, 12 medics, 18 nurses, medical trainees, and laborers. One of the medical technicians was described as a "famous surgeon." There were 100 wounded being treated after the Tet offensive. This element is located "roughly midway between elements 1 and 2 and may be a separate section of medical element 2, or one and the same with element 2 due to an error in reporting."⁷

The picture of the Ba Thu medical complex that emerges from these individual reports is not entirely clear. The four arbitrary elements that make up the complex appear to have a total bed capacity of about 700. Element 2—the Binh Tan Military Hospital—appears to be the command center and the main treatment facility, and element 3 is probably its receiving and recuperation area because the medical exfiltration route from Long An Province, SVN, leads directly to element 3. (See figure.) Element 4, because of its close proximity to element 2, is probably also included in the command, or represents an error of location. Element 1 is probably under the medical section of VC MR-4 but may not be directly subordinate to the VC Binh Tan Sub-region because it has its own receiving station located on the border and because it is nearly five miles south of element 2. It is also possible that element 1 is no longer active since no reports concerning it have been received for at least two years. Elements 2, 3, and 4 appear to be quite active, however, and these elements

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contain 600 of the estimated total of 700 beds for the entire Ba Thu complex.⁸

THE MIMOT AREA, KOMPONG CHAM PROVINCE

A second complex of VC/NVA military medical facilities is located in Kompong Cham Province, Cambodia.* Kompong Cham borders on Tay Ninh and Binh Long Provinces of SVN.

The town of Mimot (XU-3006) is located on route 7 and is close to the SVN border at Tay Ninh Province. Most of the medical facilities associated with Mimot, however, lie to the northeast of that city, between it and Snoul, or to the southwest, down to the junction of Kompong Cham and Prey Veng Provinces of Cambodia with Tay Ninh Province of SVN. These facilities appear generally larger in bed capacity than those at Ba Thu, but are more diffuse in their layout. Specific coordinates for facilities in the Mimot area are generally lacking.

The first (and largest) military medical facility to be described in the Mimot area was the VC K71A Hospital, first reported in 1966. It is believed to be located at XT550950 between Mimot and Snoul.^{9 10} Hospital K71A was said to have treated sick and wounded VC (NVA troops not mentioned) from Tay Ninh and Binh Long Provinces of SVN. It is subordinate to COSVN. The facility appeared to be nonmobile, with a theoretical capacity of 3,000 patients (no more than 1,500 patients were treated at any one time). However, only some 900 beds were sheltered, these being housed in 75 nylon roofed huts containing 12 hammocks each. Treatment rooms were in underground shelters.⁹

*See figure. All grid coordinates for the Mimot Complex are from AMS Series L7016, Cambodia, 1:50,000, 1965.

Supplies for the K71A hospital came from NVN, the open market in Cambodia, and black markets in the RVN. Equipment was said to include X-ray and electrocardiograph, but it is unlikely that this equipment was usable due to a lack of electricity.

The organization of K71A consisted of a Hospital Command Committee that included the hospital commanding officer (physician) and two deputy commandants, with a subordinate Medical Specialties Section and a Medical Section.⁹

The Medical Specialties Section had a medical procurement group with two pharmacists one "doctor," and four medics. The section also had a blood transfusion group with one "doctor," two medical technicians, and two nurses.

The Medical Section was commanded by one "doctor" and three assistants. The section was divided into four external treatment groups and three internal treatment groups. These treatment groups were each headed by a "doctor" and assisted by an average of 8 to 10 medical technicians and medics. Work included treatment of major and minor surgery, light wounds, eye injuries, malaria, etc. No category was given for two of the groups.

In addition to the regular medical staff, K71A had two Soviet-trained physicians as advisors. One advised on internal diseases and injuries of the nervous system; the other on abdominal surgery.

The K71A hospital appears to be one of three VC/NVA hospitals reported to lie between Mimot and Snoul, and is probably the hospital with underground facilities mentioned [redacted]

[redacted] as being in Kompong Cham in 1967-68.^{10 11} Because of its large size and diffuse layout, however, this hospital may ac-

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count for more than one of the three facilities reported to lie between Mimot and Snoul.

A second VC/NVA hospital reported in 1968 to lie between Mimot and Snoul had a capacity of 400 patients sheltered only by trees but having underground operating facilities. The source of medicines was said to be from Mimot pharmaceutical suppliers and from the infirmary of the Snoul Rubber Plantation through Chinese intermediaries. No information was given on the medical staff or other particulars. This facility was in use during Operation "Junction City" and possibly represents some of the unsheltered beds of K71A set up for the combat emergency.¹⁰

To the southwest of Mimot, a VC/NVA hospital was reported in 1968 to lie along Route 7 at Samraong (XU228049). This facility was clearly a temporary one; all of its 500 patients were housed under trees and no underground operating rooms existed. This hospital was closed after the Tet offensive in January-February 1968.¹²

To the east of Mimot, a rural VC/NVA hospital was reported to lie at XU535034. As of 15 April 1968, this facility consisted of two thatched huts 11m x 6m. The staff included three "doctors" and nine female nurses. One hundred patients could be accommodated. The hospital had established an aid station at XU538038 that treated local civilians as a civic action. No other information was furnished.¹³

In the spring and summer of 1968, VC/NVA authorities closed down a "medical corridor" (casualty exfiltration route) that had been established from Gia Dinh Province, SVN, through Cholon and Saigon, into Svay Rieng, Cambodia. This "corridor" had been established after the Tet offensive but was abandoned in favor of a route running to Mimot, Cambodia (XU3006),

from Binh Long and Binh Tuong Provinces of SVN. The new "corridor" is to support future offensives, presumably in the III Corps and Saigon areas. New aid stations and mobile surgery units are being set up along the new route and these will be manned by 100 new medical trainees transferred from VC/NVA medical training facilities in Cambodia.¹⁴

The complex of VC/NVA medical facilities located in the area of Mimot probably is dominated by the K71A hospital. This facility is the only sizable and relatively permanent one described for the entire area. While the patient capacity of K71A is over three times that of the Binh Tan Military Hospital at Ba Thu in theory, the effective bed capacity of about 900 and the size and composition of the medical staff and facilities would place it roughly on a par with Binh Tan. The total effective bed capacity of all hospital facilities in the Mimot area is probably on the order of 1,000.

As for the town of Mimot itself, the only medical facilities that are believed to be used by VC/NVA forces are the offices of certain private physicians, and these are almost certainly small in number. One instance of this concerns a French physician in Mimot who is alleged to be treating VC wounded in his private office.¹⁵ The principal importance to VC/NVA forces of Mimot is as a source of medical supply through the local pharmacies or through smuggling operations.

MEDICAL FACILITIES OF THE CENTRAL OFFICE FOR SOUTH VIETNAM IN KOMPONG CHAM PROVINCE

In addition to strictly military hospitals, the Central Office for South Vietnam (COSVN) maintains a civil medical facility in Cambodia. By September 1966, the SVN Civil Health Section had established its command post med-

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ical installations (WT942752) about two kilometers from Tay Ninh Province, SVN, at a point where Kompong Cham and Prey Veng Provinces of Cambodia meet with Tay Ninh Province. A reception station was located nearby on the border at WT955746. Party cadres were required to report to the reception station before proceeding to the command post (designated B1).¹⁶ The command post was responsible for the administration of two hospitals and a pharmacy.

The first of the two hospitals was designated B2 and was situated at WT945770. It has a 40-patient capacity and was separated into two sections: one for high-level cadre and a second for intermediate-level cadre. The staff consisted of two female and two male physicians.¹⁶⁻¹⁸

The second hospital was called B3 and was divided into three small elements—K3, K2, and K5. The three elements were separated to minimize the danger from air attacks. Hospital K3 had three thatched roof huts, several huts covered with nylon sheeting, and an underground operating room. The hospital was organized into an internal diseases section with two physicians and between 15 and 20 medical technicians and nurses and an external diseases section with about six physicians, four medical technicians, and several nurses. Hospital K2 had a patient capacity of 30 to 40 and consisted of five thatched huts and a number of nylon-covered frame huts. This facility performed dental work primarily and took nonserious cases from K3 when that facility became overcrowded. The staff consisted of one dentist and about 15 medical technicians and nurses. Hospital K5 had a 50-patient capacity and received seriously ill patients who required long treatment and postoperative patients from K3. The staff consisted of two medical technicians and about 10 nurses.

The pharmacy for the COSVN facilities compounded medicines from raw materials furnished by the Civil Health Section of COSVN. One element of the pharmacy group prepared traditional galenicals. The drugs prepared from raw materials were reported to include: atropine, morphine, calcium chloride, vitamins (B complex and C), saline and glucose solutions for intravenous use, novocaine, noradrenaline, adrenaline, strychnine, emetine, anticholera and smallpox vaccines, antitoxins for snake bite, and various tonics.¹⁶⁻¹⁸ The pharmacy staff included 40 or 50 pharmacists and assistants. The production of such drugs and biologicals from raw materials under primitive jungle conditions is, however, impossible, and the manufacturing process was undoubtedly limited to preparation of solutions and possibly the tableting of drugs, much as pharmacists did in the United States a number of years ago.

In addition to its medical treatment facilities, the COSVN hospital maintained a medical training center called B5.^{16 17} (See section, "The COSVN medical training facility in Kompong Cham Province.") The COSVN medical installation in Cambodia offers the most comprehensive medical care to be found in the area. Serving VC civilian cadres almost exclusively, this hospital appears to have about 15 physicians for a patient capacity of 200, or about one physician for 13 patients. The physicians are supported by nearly 60 medical technicians, medics, and nurses. The military medical facilities are not nearly as well equipped or staffed, and are always subject to sudden and severe overloading during an offensive. As a civic action gesture, the COSVN hospital also provides medical services to selected Vietnamese immigrants living in Cambodia and to certain Cambodian military officers garrisoned in the area who arrange the smuggling of medical supplies to the COSVN and military medical units.¹⁷

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MONDOLKIRI AND RATANAKIRI PROVINCES

VC/NVA military medical facilities in Mondolkiri and Ratanakiri Provinces are dominated by one large fixed hospital designated V-84, with four smaller mobile hospitals attached to it.¹⁹ Another hospital, the NVA 17th Hospital, operates independently in Ratanakiri Province.²⁰ No specific coordinates were furnished for either hospital.

The V-84 hospital and its attached units were reported in February 1968 as serving VC/NVA units in Kontum, Pleiku, and Darlac Provinces of SVN. V-84 was described as having a patient capacity of 3,000, laid out in three areas, and housed in thatched huts holding 15-20 patients each. It is a fixed installation apparently located in Mondolkiri Province in the jungle, about 10 to 12 kilometers from SVN, and is not near any Cambodian villages. All supplies are said to come from NVN, with none being procured in Cambodia or from RVN black markets. V-84 was divided into four branches: medical tactics, sanitation, pharmacy, and treatment. The commanding officer was a physician with two physician deputies. V-84 took both short-term and long-term patients.

The treatment branch was divided into nine departments: neurology; internal medicine; surgery; thoracic medicine; dental and stomatology; ear-nose-and-throat; an X-ray unit (generator powered); laboratory; and a miscellaneous department that included the pharmacy. The staff consisted of 20 to 30 physicians, mostly graduates of the Hanoi Medical College, and an unspecified number of medical technicians, medics, and nurses.

The four smaller mobile hospitals attached to V-84 were designated V1, V2, V3, and V4. These hospitals all possessed surgical facilities.

Seriously wounded patients were passed on to V-84. These hospitals were maneuvered according to combat needs. V1 and V3 took patients from Kontum Province, V2 from Darlac Province, and V4 from Pleiku Province, all in SVN.¹⁹

V-84 appears to be a unit comparable in make-up to K71A in the Mimot area of Kompong Cham. While V-84 has a patient capacity of 3,000 in theory, it is said that 500 patients was the largest number to be handled at one time—this following the Tet offensive. When seen in this light, there would appear to be one physician for every 17 wounded. This is a very favorable ratio for VC/NVA military hospitals and compares favorably in this respect with the COSVN facility.

In Ratanakiri Province, as of June 1968, the NVA 17th Hospital, a fixed installation, was located about five miles from Kontum Province, SVN, at about the 14th parallel (no coordinates given). The patient capacity was said to be about 180. Patients were housed in nine thatched huts about 10m square, laid out in two parallel rows. The staff consisted of one VC "doctor," one NVA medic, ten nurses, and five untrained women that prepared food and gave oral medications. Most of the patients were NVA with only a few VC. Equipment consisted only of basic surgical tools, hypodermic syringes, and medicines. The sources of supply were not given.²⁰ The NVA 17th Hospital appears typical of VC/NVA medical facilities found in SVN.

TAKEO PROVINCE

In Takeo Province, only one medical installation is known to have been operational. This was a VC/NVA aid station established on 19 April 1968 near Khum Som town at VS8468 near VC/NVA base area 705. The staff consisted of one surgeon and seven nurses. Patient capac-

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ity is unknown. The aid station was subordinate to the VC MR II Hospital (location unknown) and was to receive wounded VC prior to their assignment to a hospital. The aid station also treated local Vietnamese villagers from Chau Doc Province, SVN, and a medical team traveled to three local villages in Cambodia as a civic action.²¹ This facility probably is a receiving station, but it is not known if the hospital to which it is subordinate is located in SVN or in Cambodia.

VC/NVA MEDICAL TRAINING FACILITIES IN CAMBODIA

Three VC/NVA medical training facilities have been identified in Cambodia, all associated with large hospital installations. One is associated with the Ba Thu complex, one with the COSVN hospital in Kompong Cham, and the third in Mondolkiri Province, probably associated with the V-84 hospital. Levels of medical training are said to range from medic up to physician.

It is well to distinguish between the training received by NVA and VC personnel in NVN and that received in SVN or in the Cambodian installations. NVA or VC medical personnel trained in NVN at the Hanoi Medical College or in military hospitals are reasonably well grounded in basic medicine and particularly in wound treatment. Practical training has been available in dealing with bombing victims in NVN. Those medical personnel trained entirely in SVN or Cambodia, however, have received far less theoretical training, have not had the proper equipment to work with, and have had to accept a very short and erratic curriculum. The training is therefore inferior to that in NVN. Lack of supplies and crude working conditions in combat areas of SVN affect the effectiveness of both the well trained and the poorly trained.²

The NVA divides its medical personnel into four categories: doctor, medical technician, medic, and aid man. The doctor is required to have ten years of general education and seven years of medical education (two preclinical years, five clinical years). The medical technician must have eight to nine years of general education and two years of medical training. The medic must have seven years of general education and six months of medical training. The VC use the same categories as the NVA but necessarily fall short of an ideal situation due to the pressure of combat operations.²

The Medical Training Facility at Ba Thu

In March 1967, a medical training facility was described as being located about 100m from the Binh Tan Military Hospital. This school trained medical personnel to the level of medic. Classes of about 15 persons were instructed in the following subjects; internal diseases and external medicine (surgery)—two months; midwifery—20 days; use of common medicines and vitamins—one month; and fractures and first aid—three weeks. This curriculum provided four and a half months of class instruction. The remaining one and a half months were spent in practical training in one of the medical elements of the Ba Thu complex. The school was run on a civilian basis where no military garb or military formations were required. Ten and one-half hours a day were spent in class.⁶ With 15 students per class, this school has probably graduated about 60 medics since 1967.

The COSVN Medical Training Facility in Kompong Cham Province

The COSVN medical school, designated B5, accepted in 1966 medics with seven years of general education and three years of military medical experience for what was described as the "doctors course." The course was prefaced

with one month of political indoctrination, followed by 10 to 12 months of classroom instruction in a single medical specialty (surgery, internal medicine, etc.). Details of the curriculum are not known. [redacted]

[redacted] expressed a low opinion of the professional qualifications of these graduates, even in the single specialty in which they had received training. The attempt to produce a physician in less than one year cannot prove any more successful among the Vietnamese communists than it did among the Chinese in the mid 1950's. The inadequate training received will affect the graduate throughout his career.^{2 16} The graduation rate at this school is unknown.

The Medical Training Facility in Mondolkiri Province

In the spring of 1966, a VC medical school was located in Mondolkiri Province near Quang Duc Province, SVN. The school was laid out in a forest and was probably subordinate to the VC V-84 hospital. Students were selected from VC combat units for training to the level of medic. The general education requirement for this school was not reported.

The plant consisted of six buildings, including four barracks of 10 persons each, a conference hall, and a kitchen. There were no guards. Training was headed by an NVA medic, and administration and logistics were handled by two enlisted medical men. The class contained 40 trainees divided into four 10-man squads. The trainees received four months of external medicine and four months of internal medicine. External medicine consisted of wound dressing; use of hypodermics; and the cause, prevention, and treatment of common diseases. This curriculum actually represents a combination of external and internal medicine subjects which was given [redacted] in four instead of eight months. The reason for this, [redacted]

[redacted] was the "pressure of the war." After the four-month training period, which included no practical work, the source was returned to his unit—the VC Bac Son Regiment in Phuoc Long Province, SVN—as a medic. Details of the full curriculum normally offered at this school have not been reported, but it can be assumed to be similar to that of the school at Ba Thu. The V-84 hospital would normally provide practical instruction. With a graduation rate of approximately 80 students per year, this facility has probably produced about 240 medics from 1966 to date, some with considerably more training than others.²²

VC/NVA medical training in the three schools in Cambodia is similar to that carried out in training facilities in SVN. The location of these facilities in Cambodia provides freedom from direct attack by ground forces but does not allow for either better quality or more extensive training. These factors apparently are governed more by finances and the availability of qualified instructor personnel than by the greater physical security. The three schools in Cambodia can then be assessed the same as those located in SVN—rudimentary, but adequate by VC standards under difficult combat conditions.

SOURCES OF MEDICAL SUPPLY FOR VC/NVA HOSPITALS IN CAMBODIA

A large part of the drug supply and medical equipment used by VC/NVA hospitals in Cambodia is procured in or through Cambodia itself. The Binh Tan hospital at Ba Thu, for example, obtains 90 percent of its supplies from open markets in Cambodia and 10 percent from SVN black markets. In the Mimot area, the K71A and the COSVN hospitals obtain most of their supplies locally, with only a low percentage coming from NVN and from black markets in SVN. The only exception to this general rule is

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the V-84 hospital in Mondolkiri, where all supplies are said to come from NVM.

The establishment by VC/NVA military forces of medical facilities on Cambodian soil has produced a significant traffic in drugs from Phnom Penh and other Cambodian cities. While drugs from local Cambodian pharmacies and those imported from free world and communist countries have been moved to the SVN border region semiclandestinely for some time, the placement of medical facilities on Cambodian soil has accelerated smuggling operations and has involved many Vietnamese immigrants in Cambodia and local Cambodian citizens who had not participated previously. The forwarding of drugs to the VC now forms a portion of the economy of certain areas of Cambodia convenient to VC in SVN.

By September 1966, VC/NVA purchases of drugs, mostly imported, from Cambodian pharmacies had begun to cause shortages of critical drugs in Phnom Penh and other cities. By November 1967, a substantial drug trade existed between Chinese business interests in Phnom Penh and points in Kompong Cham Province near Mimot. At that time, the principal items traded were surgical instruments, hypodermic syringes, quinine, and cod liver oil pills.²³ The involvement of Cambodian military officers in the trade was evidenced in December 1967 when the officer in charge of Cambodian military medical supplies in Phnom Penh was reported to have stolen 9,000 morphine ampoules and sold them through a Phnom Penh smuggling ring to VC near Mimot.²⁴ Further involvement of Cambodian military personnel was surfaced in a report of April 1968 describing an arrangement in which VC purchasers from a VC camp about three miles SE of Mimot placed drug orders through Cambodian border guards to four Chi-

nese-owned drug houses in Phnom Penh. Quantities of morphine, quinine, tetracycline, cardiac stimulants, and surgical instruments were then taken to Mimot and delivered to the VC camp.²⁵

The city of Snoul in Kratie Province, northeast of Mimot, also figures in the drug traffic. A report of July 1968 traced the movement of imported drugs to this city for transportation to VC/NVA forces. The medicines were said to have been stored temporarily in Phnom Penh, then moved to Snoul by private auto.²⁶ There is some evidence that at least one of the private autos belonged to the Cambodian District Military Commander at Keosima (YU0456) and that his wife transported penicillin and other drugs from Phnom Penh to Snoul in June 1968. From there, the drugs were sent by bicycle to Keosima and the VC.²⁷

In addition to organized drug trading groups, many small individual operations have appeared around Mimot, Snoul, and Svay Rieng Town. These operations involve Cambodian villagers, some of whom were sent by the RKG to inhabit the border area to prevent foreigners (Vietnamese refugees) from moving in. The villagers soon found that 100 to 150 riels* per day could be made by carrying small amounts of food and medicines to VC camps near the border. Hundreds of bicycles are said to move back and forth along the roads carrying supplies. The practice is actively protected from local Chinese interlopers by local RKG authorities who seek to limit the privilege to Cambodian nationals.²⁸ In one case, a single entrepreneur pedaled all the way to Phnom Penh to buy a bicycle load of drugs.²⁹

*35 riels equal one US dollar.

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CAMBODIAN GOVERNMENT
ACTIVITIES REGARDING MEDICAL
AID TO VC/NVA FORCES

The presence of VC/NVA forces on Cambodian soil and the sizable traffic in food, medicines, and other supplies have presented problems to the RKG. The government finds itself in a very delicate position, unable to afford to seriously slight the United States or to incur the wrath of the communist forces that surround them. The delicate balance of forces responsible for the present state of Cambodian "neutrality" probably can be preserved only as long as the Communists can make use of Cambodian border areas for supply and refuge.

In 1965, it was reported that the Cambodian Armed Forces general staff agreed to a request from the NFLSVN to allow a VC hospital to be placed in Ratanakiri Province opposite Pleiku Province, SVN. This may be the Communist facility burned by FARK during a recent sweep.³⁰ A report in 1966 alleged that Sihanouk had instructed the governor of Svay Rieng Province to provide hospitalization and food for the VC.³¹ This may have followed from one of Sihanouk's speeches where he expressed a willingness to aid wounded VC. It is uncertain that the VC/NVA took up the offer or that RKG help was extended beyond public gifts

of medicine. Still another report in 1966 alleged that high-ranking VC wounded were occasionally treated at the French Calmette Hospital for plantation owners in Phnom Penh and that the wounded were often flown to Phnom Penh in plantation-owned aircraft.³² Confirmation is lacking. In January 1968, Cambodian Foreign Minister Phurissara was reported to have assured NVN that Cambodia would continue furnishing public gifts of pharmaceuticals to VC/NVA forces.³³

Conversely, the RKG has taken steps toward controlling the amount of supplies obtained by the VC/NVA. One step applied to medicines required the Vietnamese Communist offices in Phnom Penh to obtain RKG authorization prior to receiving foreign-made drugs in Cambodia. An example was a gift of medicines from the Belgian Committee for Medical and Sanitary Aid to Vietnam in November 1968. The regulation required that before the shipment of drugs could be made (probably by international mail), the VC civilian representative in Phnom Penh had to be informed as to the number of packages, nature of the merchandise, total weight, and the intended date of shipment. The VC representative then had to secure authorization from the RKG before the shipment could be made. Such a step probably was an attempt by the RKG to be aware of what is being shipped to the VC, by whom, and in what amounts, for duty collection purposes.³⁴

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REFERENCES

The source references supporting this paper are identified in a list published separately. Copies of the list are available to authorized personnel and may be obtained from the originating office through regular channels. Requests for the list of references should include the publication number and date of this report.

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